DOCUMENT RESUME

ED 345 617 HE 025 512

AUTHOR	Abraham, Ansley A., Jr.
TITLE	College Remedial Studies: Institutional Practices in the SREB States.
INSTITUTION	Southern Regional Education Board, Atlanta, Ga.
PUB DATE	92
NOTE	34p.; This report expands upon the information contained in ED 333 783.
AVAILABLE FROM	SREB Information Office, 592 Tenth Street, N.W., Atlanta, GA 30318-5790 ($5.00).
PUB TYPE	Statistical Data (110) -- Reports - Research/Technical (143)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Credits; Developmental Studies Programs; Educational Testing; Higher Education; *Private Colleges; *Program Descriptions; Program Development; Program Effectiveness; *Public Colleges; *Remedial Instruction; Remedial Mathematics; Remedial Programs; Remedial Reading; Student Placement
IDENTIFIERS	*Southern Regional Education Board

ABSTRACT

A study was done of the specific program characteristics of remedial and developmental programs at institutions of higher education in the 15 states of the Southern Regional Education Board (SREB). The data and findings were part of a larger survey of public and private colleges and universities by SREB which examined remedial enrollment and the organization and operation of remedial programs. Highlights of the findings include the following: (1) over four-fifths of the colleges and universities in the region have written policies to govern the placement of academically under-prepared students; (2) nearly 125 combinations of about 75 different tests in the areas of reading, writing, and mathematics are used to place students in either degree credit or remedial courses; (3) 85 percent of responding institutions offered at least one remedial course in reading, writing, or mathematics; and (4) reforms of the 1980s have all but eliminated the controversy over the awarding of degree credit for remedial studies. Following a conclusion, eight recommendations are presented. Included are 17 tables, an appendix listing the placement tests used by institutions in the SREB states, and 5 references. (JB)

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COLLEGE REMEDIAL STUDIES:
Institutional Practices in the SREB States

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COLLEGE REMEDIAL STUDIES:
Institutional Practices in the SREB States

Ansley A. Abraham, Jr.

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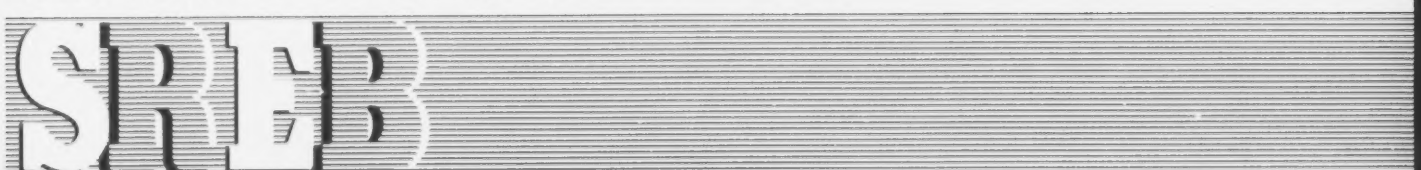

Southern Regional Education Board

Highlights

The Southern Regional Education Board undertook a 1988-89 survey of public and private colleges and universities in the 15-state SREB region in an effort to provide better information about practices and trends in college-level remediation. The survey examined remedial enrollment and the organization and operation of remedial programs.

Key enrollment findings from the survey were published in the SREB report "They Came to College? A Remedial/Developmental Profile of First-Time Freshmen in SREB States" (*Issues in Higher Education #25*, 1991). This report expands on the information provided in "They Came to College?" by examining in detail the specific program characteristics of remedial and developmental programs in the region.

Among the highlights in this report:

★ Over four-fifths of the colleges and universities in the SREB region have written policies to govern the placement of academically underprepared students—and 45 percent or more of all public institutions report that they are guided by state or system level policies.

★ In the SREB region, almost 125 combinations of about 75 different tests in the areas of reading, writing, and mathematics are used to place students in either degree credit or remedial courses.

★ Among responding institutions, 85 percent offered at least one remedial course in reading, writing, or mathematics. Across all institutions, remedial mathematics courses were more likely to be offered than writing courses, and writing courses were more likely to be offered than reading courses.

★ Reforms during the 1980s have all but eliminated the controversy over the awarding of degree credit for remedial studies. Only about two percent of the public and five percent of the private institutions who responded still award degree credit for remedial courses. Institutional credit (credit that counts toward full or part-time status but not toward the degree) is most frequently awarded by public institutions, and private institutions are about as likely to award elective credit as they are institutional credit.

★ About three-fifths of responding institutions report that they permit simultaneous enrollment in remedial and regular college courses, with restrictions; about one-fifth permit such enrollment with no restrictions.

★ About one-third of all institutions have summer remedial course enrollment requirements. About 25 percent of those require summer enrollment as a condition of admission. Doctoral and comprehensive four-year institutions are more likely to require summer enrollment than two-year institutions.

★ The traditional academic department is the most frequent means of delivering remedial education in the region, with 41 percent of the institutions using this approach in reading, 57 percent in writing, and 58 percent in mathematics. About a third of the institutions use separate divisions to offer remedial reading, writing, and mathematics.

- ★ Less than half of the institutions responding to the survey were able to, or chose to, report retention rates for remedial and non-remedial students. About twice as many of these institutions report retention rates of 25 percent or less for remedial students as report the same retention rates for non-remedial students. The median percent of students retained to start a second year at the same institution is 55 percent for remedial students and 65 percent for non-remedial students.

- ★ The average number of faculty providing remediation is almost four times greater for public than private institutions in all three subject areas. Institutions rely heavily on part-time faculty to teach remedial students—typically, about half the faculty providing such instruction are part-time. In all three subject areas, the highest degree held by the vast majority of remedial faculty, about 70 percent, was the master's; another 15 percent have a doctoral degree.

- ★ Only about a third of all institutions that have remedial education report that ongoing training is available for remedial instructors. Public institutions are twice as likely as private colleges to provide ongoing training; doctoral/research institutions are somewhat more likely than two-year institutions to provide such training.

- ★ More than 90 percent of the institutions reported that remedial courses are supported by general institutional funds allocated through the regular budgeting process. Some programs are supported in part with special appropriations or other special funds that do not provide the long-term security of core academic funding.

COLLEGE REMEDIAL STUDIES:

Institutional Practices in the SREB States

Introduction

The problem of academically underprepared students entering college is so pervasive that over 90 percent of the public and 70 percent of the private institutions in the Southern Regional Education Board (SREB) states offer remedial and developmental programs of some kind. These programs are not limited to community colleges and baccalaureate-level institutions—they also may be found at many "flagship" universities.

The issues raised by college remedial studies programs have serious implications at every point along the educational pipeline, from early childhood programs to graduate schools. They involve important questions about quality and standards—and about morals and ethics. Educational and legislative leaders need to be as informed and knowledgeable about college remedial studies and how they are structured as they are about programs in engineering, business, or law.

Higher education—despite a long history of large enrollments in such coursework—has never fully accepted college-level remediation as an integral part of its role and mission. One consequence of this lack of acceptance has been poor data collection and evaluation. As a result, our basic understanding of how institutions, states, and the SREB region as a whole are responding to the demand for developmental education is limited at best.

The Southern Regional Education Board has undertaken several studies in an effort to provide better information about practices and trends in college-level remediation. Most recently, a 1988-89 survey of public and private colleges and universities in the 15-state SREB region. This survey examined two elements of remedial education: (1) enrollment, and (2) the organizational and operational characteristics of programs.

Data from the survey were first published in a 1991 SREB *Issues in Higher Education* report, "They Came to College? A Remedial/Developmental Profile of First-Time Freshmen in SREB States." The SREB report addressed the issue of enrollment of academically underprepared first-time freshmen entering higher education. It found that more than one-third of the first-time freshmen who enroll in public and private colleges are not fully prepared to begin college-level work. These students take at least one remedial course in reading, writing, or mathematics. More specifically, in the 15 SREB states, a typical college freshman class of 500 students includes about 180 students (36 percent) who need additional academic help in reading, writing, or mathematics before taking "regular" college courses earning degree credit.

Other key findings from the SREB report "They Came to College?" (*Issues in Higher Education #25*, 1991) were:

- The percentage of first-time students who need remedial help is only slightly lower at private institutions (32 percent) than at public institutions.
- States with mandatory testing and placement policies that set common standards across institutions tend to have higher percentages of freshmen identified as needing remedial assistance—presumably because all of the institutions are using the same standards to uncover academic weaknesses during the admissions process.
- Remedial enrollment rates for black and Hispanic students are consistently one and one-half to two times those for white students, although more white than black students take remedial courses. In a typical remedial class of 10 students, six students would be white and four would be minorities.
- Almost four of 10 entering freshmen need remedial assistance in mathematics.
- Reported remedial enrollments at most public and private institutions have increased slightly since 1984. Two-year colleges had the largest increase; doctoral institutions the least—but, on average, 25 percent of freshmen at doctoral universities needed at least one remedial course.

This report expands on the information found in "They Came to College?" by examining specific program characteristics of remedial and developmental programs at colleges and universities in the SREB states.

Background

The 1988-89 SREB survey of remedial and developmental programs was mailed to 826 two-year and four-year public and private institutions in the SREB states. The surveys were distributed to institutions that offer a freshman-level curriculum and award at least the associate or baccalaureate degree. About 73 percent, or 606 institutions, responded to the questionnaire. Of these, 407 were public institutions and 199 were private. Response rates ranged from 50 percent for private two-year colleges to 88 percent for public four-year institutions. Also, response rates are affected by state or institution policies on remediation. For example, Florida law, with one exception, requires all remediation to be offered at the two-year college level.

For the purposes of this study, *remedial education* is defined as any programs, courses, or activities designed specifically for first-time entering freshmen who have basic deficiencies in reading, written or oral communication, mathematics, study skills, or other skills necessary to do beginning college-level work as defined by the institution. The term *developmental education*, which is used by some institutions, is used here interchangeably with *remedial education*.

This analysis addresses eight areas of remedial program organization and operations:

- Program policies and placement criteria
- Remedial courses and programs
- Organization and support services
- Retention rates for remedial students
- Evaluation of remedial courses/programs
- Exit criteria for remedial courses/programs
- Faculty who teach remediation
- Funding for remediation

Since the data reveal different enrollment patterns for courses in reading, writing, and mathematics, information is presented for each of the three subject areas.

Policy and Placement

Written policies usually indicate an organization's operational intentions. Such policies suggest forethought and a formalized process of planning, procedures, communication, etc. It might be reasonable to assume that colleges and universities with written policies for their remedial studies programs intend to operate their programs using the same level of awareness or concern applied to any other program on campus governed by academic policy.

Over four-fifths of the colleges and universities in the SREB region reported that they have written policies to govern the placement of academically underprepared students. Specifically, 86 percent of the public and 77 percent of the private institutions report that they have written policies—and 45 percent or more of all public institutions report that they are guided by state or system level policies.

Related to the issue of policy is the issue of remedial placement, or more specifically, placement standards. Institutions were asked to identify tests and cut-off scores used to place students in remedial or college-level courses.

In the SREB region, almost 125 combinations of about 75 different tests in the areas of reading, writing, and mathematics are used to place students in either degree credit or remedial courses (see Table 1). Public institutions use more combinations of tests (112) than private institutions (74), and two-year colleges use more than doctoral/research institutions, regardless of whether they are public or private. Tests in all three curriculum areas range from those that are developed by the institution to standardized, nationally normed tests like the Scholastic Aptitude Test (SAT) or American College Test (ACT). Many institutions use more than one test to determine placement. For each type of institution, Table 2 lists the 10 most frequently used tests for reading, writing, and mathematics.

Reading. In reading, 36 different placement tests were identified by institutions in the SREB states. Thirty-three of these 36 tests were used by public institutions, and 21 were used by private institutions. The Nelson Denny Reading Test—used by 116 institutions—was the most frequently used. Other widely used tests include the ACT-combined (76), ASSET-reading (51), SAT-verbal (39). It is interesting that tests popularly used by public institutions are not necessarily nor frequently used by private institutions, and vice versa. For example, ASSET-reading (49), the third most popular reading test used by public institutions, is not even in the top 10 for private institutions. These differences might be accounted for by admissions or state testing requirements, or by state-to-state differences in the number and kinds of institutions responding to the survey.

TABLE 1

Number of Different Tests Reported for Remedial Placement, by Institution Type SREB States, 1988-89

Inistitution Type	Number of Different Placement Tests Reported			
	Reading	Writing	Mathe-matics	Total
Public				
Two-Year (N=241)	29	31	38	98
Liberal Arts/Comprehensive (N=97)	25	26	27	78
Doctoral/Research (N=39)	14	16	16	46
All Public (N=377)	33	36	43	112
All Private (N=140)	21	23	30	74
All Institutions (N=517)	36	38	48	122

Writing. For writing, 38 different tests were used for placement purposes. Thirty-six of these 38 tests are used by public institutions and 23 by private institutions. Institutionally developed tests are the most frequently used (102 institutions). These tests are followed in frequency of use by ACT-combined (76), ACT-English Subtest (51), ASSET-Language Usage test (49), and SAT-Verbal (46).

Public colleges rely most often on the ACT-combined (61) for writing placement, while private institutions rely most heavily on in-house tests (46). The ACT-combined is only the fourth most popular placement test among private institutions. As in reading, several tests are popular in one sector but not in the other.

Mathematics. Colleges used 48 different tests to place students in mathematics— 43 of the 48 tests were used by public institutions and 30 by private institutions. Institutionally developed tests are used most frequently (used by 128 institutions). These tests are used more than twice as often as the next highest-ranked test, the ACT-combined (63 institutions), followed by SAT-math (57), ACT-Math Subtest (49), and ASSET-Intermediate Algebra (37). As in the reading and writing areas, several tests popularly used by public institutions are used infrequently by private institutions and vice versa.

TABLE 2

Frequency and Rank of Test Used for College-Level Placement
SREB States, 1988-89

		Frequency (Rank)					
	Tests	All Institutions	All Private	All Public	Doctoral/ Research	Liberal Arts/ Compre- hensive	Two-Year
Reading	Nelson-Denny	116 (1)	32 (1)	84 (1)	10 (2)	21 (1)	53 (1)
	ACT-Combined	76 (2)	12 (2)	64 (2)	11 (1)	20 (2)	33 (3)
	ASSET-Reading	51 (3)	--	49 (3)	--	5 (5)	44 (2)
	SAT-Verbal	39 (4)	8 (3)	31 (4)	4 (3)	8 (4)	19 (7)
	MAPS-DTLS-Reading	30 (5)	6 (5)	24 (7)	--	--	22 (5)
	CPE-Georgia	26 (6)	--	26 (5)	3 (4)	32 (3)	--
	MAPS-CGP	24 (7)	--	22 (8)	--	--	21 (6)
	APS for Community Col.	24 (7)	--	24 (6)	--	--	23 (4)
	AAPP-Comprehension	16 (8)	--	16 (9)	--	--	11 (8)
	ACT-Social Studies Subtest	14 (9)	3 (10)	--	--	5 (5)	23 (4)
	ACT-English Subtest	14 (9)	--	13 (10)	3 (4)	4 (6)	--
	SAT-Combined	13 (10)	4 (8)	--	--	--	--
	TABE	13 (10)	3 (10)	--	--	--	9 (9)
	TASP-Texas	13 (10)	--	13 (10)	--	5 (5)	8 (10)
	CTBS	--	7 (4)	--	--	3 (7)	--
	In-house/Insti. Developed	--	6 (6)	--	--	--	--
	CAT	--	5 (7)	--	--	--	--
	MAPS-Self-scoring Placement	--	4 (9)	--	--	--	--
	Iowa Silent Reading Test	--	3 (10)	--	--	--	--
	Stanford Diagnostic Reading Test	--	3 (10)	--	--	--	--
	CPT-Reading	--	--	--	--	3 (7)	--
	AAPP-Logical Relations	--	--	--	--	--	9 (9)
Writing	In-house/Insti. Developed	102 (1)	46 (1)	56 (3)	6 (3)	21 (1)	29 (3)
	ACT-Combined	78 (2)	17 (4)	61 (1)	7 (2)	19 (3)	35 (2)
	ACT-English Subtest	51 (3)	8 (5)	43 (4)	9 (1)	20 (2)	14 (6)
	ASSET-Language Usage	49 (4)	--	49 (3)	--	3 (7)	46 (1)
	SAT-Verbal	46 (5)	19 (3)	27 (6)	5 (4)	10 (4)	12 (7)
	TSWE	42 (6)	20 (2)	22 (7)	5 (4)	10 (4)	7 (10)
	Writing Sample/Essay	34 (7)	7 (6)	27 (6)	6 (3)	6 (6)	15 (5)
	MAPS-CGP-Writing Placement	32 (8)	--	29 (5)	--	--	28 (4)
	SAT-Combined	19 (9)	4 (9)	15 (10)	--	--	12 (7)
	CPE--Georgia	18 (10)	--	18 (8)	--	10 (4)	--
	TSWE-MAPS	--	6 (8)	--	--	--	--
	CTBS	--	5 (8)	--	--	--	--
	MAPS-DTLS-Usage Test	--	3 (10)	--	--	--	--
	TASP-Texas	--	--	16 (9)	--	7 (5)	9 (9)
	AAPP--Writing Sample	--	--	--	--	3 (7)	9 (9)
	APS for CC-Essay	--	--	--	--	--	14 (6)
	MAPS-Written English Expression	--	--	--	--	--	11 (8)
Mathematics	In-house/Insti. Developed	128 (1)	45 (1)	83 (1)	16 (1)	24 (1)	43 (1)
	ACT-Combined	63 (2)	13 (3)	50 (2)	4 (3)	18 (2)	28 (3)
	SAT-Math	57 (3)	14 (2)	43 (3)	7 (2)	15 (3)	21 (4)
	ACT-Math Subtest	49 (4)	7 (4)	42 (4)	7 (2)	14 (4)	21 (4)
	ASSET-Intermediate Algebra	37 (5)	--	35 (5)	--	3 (9)	32 (2)
	MAPS-DTMS-Ele. Algebra	32 (6)	6 (5)	26 (6)	--	6 (7)	--
	MAPS-DTMS-Arithmetic Skills	30 (7)	7 (4)	23 (7)	--	6 (7)	17 (6)
	CPE-Georgia	20 (8)	--	20 (8)	--	12 (5)	--
	ASSET-Numerical	18 (9)	3 (8)	--	--	--	15 (7)
	Mathematical Asso. of Amer.	17 (10)	5 (6)	--	--	7 (6)	--
	CTBS	--	4 (7)	--	--	--	--
	CAT	--	3 (8)	15 (9)	--	--	--
	MAPS-DTMS-Intermediate Algebra	--	3 (8)	--	--	--	--
	MAPS-CGP-Math D and E Tests	--	--	15 (9)	--	--	15 (7)
	AAPP-Arithmetic	--	--	15 (9)	--	--	10 (9)
	AAPP--Intermediate Algebra	--	--	14 (10)	--	--	11 (8)
	TASP-Texas	--	--	14 (10)	--	6 (7)	--
	Math Asso.-Placement Test Battery	--	--	--	4 (3)	4 (8)	--
	ASSET-Elementary Algebra	--	--	--	--	--	10 (9)
	AAPP--Elementary Algebra	--	--	--	--	--	9 (10)

Note: Only tests that are used by three or more institutions are listed and ranked. A complete list of all tests used for placement in SREB states is found in Appendix A.

Remedial Courses and Programs

The survey covered several different dimensions of remedial courses and programs. The survey questions sought to determine not only how many institutions offer remedial courses, but how many different remedial courses are taught on campus, and what type of credit is given for remedial courses. Institutions also were asked whether identified students were required to take remedial coursework, whether simultaneous enrollment is permitted in remedial and regular college-level courses, whether institutions offer summer programs for students needing remediation, and whether participation in summer programs is ever a condition of admission.

Participation

Among responding institutions, 85 percent offered at least one remedial course in reading, writing, or mathematics (see Table 3). The number and types of courses varied widely by institution. Of the institutions offering at least one remedial course:

- 93 percent were public; 70 percent were private.
- 99 percent of the public two-year colleges offered at least one course; only 80 percent of the private colleges did.

TABLE 3

Percentage of Institutions that Offer Remediation and Average Number of Courses Offered in Reading, Writing, Mathematics, by Institution Type, SREB States, 1988-89

Institution Type	Percent Institutions Offering One or More Remedial/Developmental Courses				Average number of Courses offered		
	Reading, Writing, or Mathematics	Reading	Writing	Mathematics	Reading	Writing	Mathematics
Public							
Two-Year (N=244)	99	92	95	96	2.3	2.1	2.9
Liberal Arts/Comprehensive (N=113)	86	63	79	82	2.1	1.8	2.6
Doctoral/Research (N=50)	78	58	72	72	1.8	1.5	1.9
All Public (N=407)	93	80	88	89	2.2	2.0	2.7
All Private (N=199)	70	47	60	62	1.9	1.7	2.1
All Institutions (N=606)	85	69	79	80	2.2	1.9	2.6

Note: Average number of courses offered are based on number of institutions that offered at least one remedial course.

- 86 percent of the public and 70 percent of the private liberal arts/comprehensive institutions offered at least one remedial course.

- 78 percent of the public and 60 percent of the private doctoral/research institutions offered at least one remedial course.

An examination of each of the three remedial subject areas (reading, writing, and mathematics) shows a similar pattern of offerings, with the highest incidence among two-year public institutions and the lowest among private doctoral institutions.

Across all institutions, remedial mathematics courses were more likely to be offered than writing courses, and writing courses were more likely to be offered than reading courses.

Average Number of Remedial Courses

Institutions with remedial programs typically offer more than one remedial course in each subject area. Not surprisingly, the average number of different courses offered is higher for public than private institutions, regardless of subject area. For example, in mathematics, public institutions average 2.7 courses while private institutions average 2.1 courses; in writing, public institutions average 2.0 compared to 1.7 in private colleges; and, in reading, public institutions average 2.2 compared to 1.9 courses in private ones.

TABLE 4

Institutional Practices for Awarding Credit, by Institution Type
SREB States, 1988-89

	Reading				Writing				Mathematics			
	Percent Institutions Awarding				Percent Institutions Awarding				Percent Institutions Awarding			
Institution Type	Degree Credit	Institutional Credit	Elective Credit	No Credit	Degree Credit	Institutional Credit	Elective Credit	No Credit	Degree Credit	Institutional Credit	Elective Credit	No Credit
Public												
Two-Year (N=241)	2.5	74.3	2.5	15.8	2.1	78.8	0.8	16.6	1.7	79.7	1.2	16.2
Liberal Arts/Comprehensive (N=97)	1.0	67.0	5.2	4.1	5.2	80.4	1.0	8.2	3.1	81.4	3.1	11.3
Doctoral/Research (N=39)	2.6	69.1	2.6	2.6	2.6	82.1	2.6	5.1	2.6	82.1	2.6	5.1
All Public (N=377)	2.1	71.9	2.9	11.4	2.9	79.6	1.1	13.3	2.1	80.6	1.9	13.5
All Private (N=140)	8.6	35.0	15.0	9.3	11.4	43.6	22.1	10.0	11.4	43.6	24.3	10.0
All Institutions (N=517)	3.9	61.9	6.2	10.8	5.2	69.8	6.8	12.4	4.6	70.6	7.9	12.6

Note: The percentages in each institution type by subject area category may not add to 100 percent; the difference indicates missing data or institutions that do not have a remedial program.

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Although the proportion of all institutions that offer remedial writing and mathematics courses is about the same (80 percent), it is important to note that the number of writing courses offered on each campus is about half the number of math courses.

Remedial Course Credit

Some educators believe that academic credit serves as an incentive for students to complete remedial coursework, but others view this practice as one that lowers academic standards. The survey collected data on the types of credit awarded by institutions for each subject area, including: *degree credit* that counts toward the grade-point-average and an academic degree; *institutional credit* that counts toward status as a part-time or full-time student (but not toward the degree); *elective credit* that counts toward elective requirements; and *no credit*.

The data in Table 4 indicate that reforms during the 1980s have all but eliminated the controversy over the awarding of degree credit for remedial studies. Only about two percent of the public and five percent of the private institutions that responded still award degree credit for remedial courses. Institutional credit is the most frequently awarded type of credit by both public and private institutions. However, public institutions are almost twice as likely to offer institutional credit as private institutions. Private institutions are about as likely to award elective credit as they are institutional credit for remedial courses.

The decision to offer institutional credit is primarily a response to requirements for financial aid eligibility. In most states, and at most institutions, these requirements stipulate that students who receive financial aid must be enrolled full-time. Unless some type of credit is given, remedial students receiving financial aid would be required to take a full academic load in addition to remedial courses. The solution is to give some sort of institutional credit for remedial work—but not to count the credit toward the degree.

Surprisingly, a higher proportion of the liberal arts/comprehensive institutions (public or private) award "degree credit" in writing and mathematics than do two-year colleges. Conversely, the percentage of two-year colleges that do not award any credit for remedial courses (about 16 percent over all subjects) is greater than for either the liberal arts/comprehensive colleges or doctoral/research universities.

Remedial Course Requirements

Institutions were asked whether course requirements for students were *mandatory*, *recommended but not required*, or *voluntary*. The data in Table 5 show that the majority of institutions have mandatory course requirements in reading (61 percent), writing (73 percent), and mathematics (71 percent). Although not significantly different, a consistently higher proportion of public institutions have mandatory course requirements. The fact that most public institutions are governed by state or system policies may explain this difference.

The data also show variations by institutional type and subject area. For example, the percentages for public institutions with mandatory course requirements in writing range from 90 percent for doctoral/research institutions to 61 percent for two-year colleges. And, for example, mandatory course requirements for liberal arts/comprehensive institutions range from 66 percent for reading to 87 percent for writing.

TABLE 5

Enrollment Requirements for Remedial/Developmental Courses, by Institution Type SREB States, 1988-89

Institution Type	Reading			Writing			Mathematics		
	Percent Institutions Whose Enrollment Requirements are			Percent Institutions Whose Enrollment Requirements are			Percent Institutions Whose Enrollment Requirements are		
	Mandatory	Recommended	Voluntary	Mandatory	Recommended	Voluntary	Mandatory	Recommended	Voluntary
Public									
Two-Year (N=241)	61.4	31.5	1.7	65.1	30.7	1.2	66.0	30.3	1.7
Liberal Arts/Comprehensive (N=97)	66.0	9.3	2.1	86.6	6.2	2.1	80.4	16.5	2.1
Doctoral/Research (N=39)	61.5	7.7	2.6	89.7	2.6	2.6	79.5	12.8	0.0
All Public (N=377)	62.6	23.3	1.9	73.2	21.5	1.3	71.1	24.9	1.6
All Private (N=140)	55.0	11.4	1.4	72.1	14.3	0.7	69.3	17.1	2.1
All Institutions (N=517)	60.5	20.1	1.7	72.9	19.5	1.2	70.6	22.8	1.7

Note: The percentages in each institution type by subject area category may not add to 100 percent; the difference indicates missing data or institutions that do not have a remedial program.

TABLE 6

Restrictions on Simultaneous Remedial/Developmental and Regular Course Enrollment, by Institution Type, SREB States, 1988-89

Institution Type	Reading			Writing			Mathematic		
	Percent Institutions in which Simultaneous Enrollments are:			Percent Institutions in which Simultaneous Enrollments are:			Percent Institutions in which Simultaneous Enrollments are:		
	Not Permitted	Permitted with restrictions	Permitted without restrictions	Not Permitted	Permitted with restrictions	Permitted without restrictions	Not Permitted	Permitted with restrictions	Permitted without restrictions
Public									
Two-Year (N=241)	2.9	69.7	22.4	7.9	67.6	22.8	10.4	66.0	22.8
Liberal Arts/Comprehensive (N=97)	5.2	52.6	19.6	11.3	62.9	20.6	15.5	64.9	18.6
Doctoral/Research (N=39)	2.6	51.3	20.5	10.3	53.8	28.2	7.7	59.0	25.6
All Public (N=377)	3.4	63.4	21.5	9.0	65.0	22.8	11.4	65.0	22.0
All Private (N=140)	5.0	40.0	20.7	9.3	49.3	27.9	14.3	46.4	27.9
All Institutions (N=517)	3.9	57.1	21.3	9.1	60.7	24.2	12.2	60.0	23.6

Note: The percentages in each institution type by subject area category may not add to 100 percent; the difference indicates missing data or institutions that do not have a remedial program in the subject area.

TABLE 7

Percentage of Institutions with Remedial Summer Programs and Percent that Require Enrollment for Admissions, by Institution Type, SREB States, 1988-89

Institution Type	Reading		Writing		Mathematics	
	Institutions with Summer Programs		Institutions with Summer Programs		Institutions with Summer Programs	
	Percent	As Condition of Admission	Percent	As Condition of Admission	Percent	As Condition of Admission
Public						
Two-Year (N=241)	34.0	13.4	35.7	12.8	36.5	12.5
Liberal Arts/Comprehensive (N=97)	29.9	27.6	34.0	36.4	37.1	30.6
Doctoral/Research (N=39)	33.3	30.8	46.2	27.8	43.6	35.3
All Public (N=377)	32.9	18.5	36.3	20.4	37.4	19.9
All Private (N=140)	17.9	44.0	24.3	44.1	22.1	32.3
All Institutions (N=517)	28.8	22.8	33.1	25.1	33.3	22.1

Note: Percentages in the Condition of Admissions column are base on number of institutions that reported a summer remedial program by institution type.

Remedial Course Restrictions

Institutions also were asked whether simultaneous enrollment in remedial and regular college courses is *not permitted*, *permitted with restrictions*, or *permitted without restrictions*. About three-fifths of responding institutions report *permitted with restrictions* and one-fifth report *permitted without restrictions* (see Table 6). This pattern is less pronounced and more variable for private institutions.

Summer Remedial Course/Programs

Do colleges require students with remediation needs to take remedial courses before being enrolled in a regular program? Do institutions offer summer programs for students identified as needing remedial assistance? Is enrollment in the summer program or course required as a condition for admission?

About one-third of all institutions require enrollment in summer remedial courses; of those, about a fourth require summer enrollment as a condition of admission (see Table 7). Over a third of the public institutions have summer programs, compared to about a fourth of the private colleges. There is not much variation by subject area in the percentages of institutions with summer remedial programs and those that require enrollment in these programs as a condition of admissions.

TABLE 8

Percentage of Institutions Offering Remedial Support Services and Institutions' Rating of Effectiveness of the Support Service, by Institution Type, SREB States, 1988-89

Institution Type	R/D Courses		Peer Tutoring		Faculty Tutoring		Additional Diagnostic Testing		Counseling		Assistance Labs/ Learning Centers		Other	
	Percent	Effec-tiveness	Percent	Effec-tiveness	Percent	Effec-tiveness	Percent	Effec-tiveness	Percent	Effec-tiveness	Percent	Effec-tiveness	Percent	Effec-tiveness
Public														
Two-Year (N=241)	98.3	4.15	81.3	3.58	61.4	3.66	62.2	3.60	90.5	3.65	86.7	4.010	14.9	4.22
Liberal Arts/Comprehensive (N=97)	96.9	4.19	87.6	3.58	62.9	4.01	70.1	3.66	87.6	3.78	97.9	4.03	16.5	4.12
Doctoral/Research (N=39)	92.3	4.18	76.9	3.85	48.7	3.88	59.0	3.76	74.4	3.96	84.6	4.200	20.5	4.250
All Public (N=377)	97.3	4.16	82.5	3.60	60.5	3.77	63.9	3.63	88.1	3.71	89.4	4.03	15.9	4.200
All Private (N=140)	94.3	3.99	80.0	3.52	72.9	3.79	52.1	3.32	83.6	3.70	76.4	3.85	9.3	4.000
All Institutions (N=517)	96.5	4.12	81.8	3.58	63.8	3.783	60.7	3.56	86.8	3.71	85.9	3.99	14.1	4.16

Note: Each support Service category percentage is based on the number of institutions shown. The effectiveness columns are based on a five-point Likert Scale (1=not very effective to 5=very effective).

The percentage of institutions requiring remedial summer program enrollment as a condition of admission varies by institutional type. For example, of those institutions with summer programs, only about 13 percent of the two-year colleges require summer program enrollment as a condition of admission. In contrast, over 35 percent of the doctoral/ research institutions and liberal arts/comprehensive colleges have such requirements in mathematics and writing.

Private institutions are more than twice as likely to require students to take summer coursework in reading and writing as a condition of admission.

Remedial Organization and Support Services

What organizational approaches are used to deliver remedial assistance in reading, writing, and mathematics? Are separate divisions or departments created? Do traditional academic departments offer the courses? Or, are the courses located in counseling and tutoring centers, or in some other campus-based setting?

The traditional academic department is the most frequent means of delivering remedial education, with 41 percent of the institutions using this approach in reading, 57 percent in writing, and 58 percent in mathematics. About a third of the institutions use separate divisions to offer remedial reading, writing, and mathematics. There are no significant differences in the approaches used by various institutional types (see Table 8).

Institutions were asked to identify the academic support services they provide students who need remediation and to rate their effectiveness. The list included such services as remedial courses, peer tutoring, faculty tutoring, additional diagnostic testing, counseling and tutoring centers, assistance labs and learning centers, and "other" approaches. Since institutions are likely to use more than one approach, they were asked to identify all approaches employed on their campuses. Classroom-based remedial coursework was used by virtually all responding institutions (97 percent), followed by counseling/tutoring centers (87 percent), assistance labs/ learning centers (86 percent), peer tutoring (82 percent), faculty tutoring (64 percent), additional diagnostic testing (61 percent), and other approaches (14 percent).

Institutions were asked to evaluate each of the support services on a five-point scale, from 1=*not very effective* to 5=*very effective*. The data show, not surprisingly, that institutions tended to give good ratings (3-5 points) to any remedial service they provided. The support service category with the highest effectiveness rating was *other*. Among the "other" services identified by the institutions were such things as computer-assisted instruction, study skills courses, summer programs, learning disability testing, and counseling. *Remedial and developmental courses* also had a high rating.

Retention

Students leave institutions in which they first enroll for many reasons. The decision to leave may be influenced by low grades, financial problems, friends attending other institutions, a desire to get a degree in a program not offered by the institution, or inadequate preparation for college that eventually leads to dismissal or voluntary withdrawal. This latter point has important implications for colleges and universities and raises some key questions.

Specifically, what is the retention rate of students who have been identified as academically underprepared yet are allowed to enroll as freshmen? This question assumes that when an institution admits students that it identifies as academically deficient, the institution either has an appropriate program to resolve the academic deficiency or has made arrangements for students to receive appropriate assistance—for example, though the local community college. Failure to exercise these options raises serious questions about the institution's integrity and sense of fairness.

Other important questions that should be asked:

- Do institutions keep retention records on students enrolled in remedial programs?
- Are remedial students retained at about the same rate as "regular" students?
- How well do remedial students compete with "regular" students once they enter regular college-level coursework
- Do entering college students who need remedial help graduate at the same, or nearly the same, rate as entering students who do not need remedial help?

The SREB survey can adequately answer only the first two questions. However, analyses of these and other survey questions make it clear that these are questions states and institutions should be asking of themselves to determine the effectiveness of their remedial programs.

Institutions were asked whether they kept retention records over the last three years for *all students*, for *students who took at least one remedial course*, and for *students who did not need remediation*. Implicit in these categories is the belief that institutions should collect retention rates for all and compare the rates of remedial and non-remedial students.

As Table 9 indicates, less than half of the institutions responding to the general survey were able or chose to report retention rates for remedial and non-remedial students. Only among public doctoral/research institutions was the response rate more than 50 percent. The rate was 46 percent for all public institutions and 36 percent for all private institutions. Consequently, caution should be used in making inferences or drawing conclusions from these data.

The data suggest, however, that institutions do a better job of retaining students who do not need remediation than students who take remedial courses. For example, twice as many of the responding institutions reported retention rates of 25 percent or less for remedial students as reported such rates for non-remedial students.

Another way to view the retention issue is to examine the median percent of students retained— where half of the responding institutions report a retention rate higher than the median and half of them report a lower rate. Across all types of institutions, the median percentage of students retained is higher for freshmen who did not need remedial courses than for those who did. The difference between these two groups is about 10 percentage points. Put differently, while remedial students were reported as more likely to leave the institutions of first enrollment, significant numbers of them persisted. This suggests, at least for institutions able to report these data, that the opportunity provided students who otherwise might not be admitted to college is paying some dividends.

TABLE 9

Percentage of Institutions Reporting Retention Rates of Remedial and Non-Remedial Freshmen, by Institution Type, SREB States 1988-89

Institution Type	Institutions Reporting Retention Rates	Institutions As Percent of All Respondents	Status of Entering Freshmen	Retention Rate Distribution 25% or Less	25-49%	50-74%	75% or more	Median Percent Retained
Public								
Two-Year			Remedial	11.7	29.7	48.6	9.9	50.0
(N=241)	111	46.1	Non-Remedial	5.4	24.3	51.4	18.9	56.0
Liberal Arts/Comprehensive			Remedial	6.7	17.8	66.7	8.9	56.0
(N=97)	45	46.1	Non-Remedial	2.2	8.9	64.4	24.4	68.0
Doctoral/Research			Remedial	0.0	28.6	33.3	38.1	63.0
(N=39)	21	53.8	Non-Remedial	9.5	4.8	38.1	47.6	74.0
All Public			Remedial	9.0	26.6	51.4	13.0	54.0
(N=377)	177	46.4	Non-Remedial	5.1	18.1	53.1	23.7	65.0
All Private			Remedial	5.9	19.6	54.9	19.6	60.0
(N=140)	51	36.4	Non-Remedial	3.9	13.7	37.3	45.1	72.0
All Institutions			Remedial	8.3	25.0	52.2	14.5	55.0
(N=517)	228	44.1	Non-Remedial	4.8	17.1	49.6	28.5	65.0

Note: All percentages and medians based on institutions reporting retention rates.

Remedial Course and Program Evaluation

Evaluation is critical. Only through evaluation can institutions determine whether remedial courses and programs are effectively contributing to unprepared students' college success. Institutions were asked to identify the type and frequency of evaluations they conduct of remedial activities. The choices included: *student evaluation of course/ program*; *instructor evaluation of course/program*; *completion rate for course/program*; *follow-up studies of the academic performance of remedial students*; and *course/program effectiveness studies*.

Most institutions (90 percent) ask students to evaluate remedial courses and programs. Fewer rely on instructor evaluation (70 percent), course completion rates (65 percent), follow-up studies (61 percent), or effectiveness studies (55 percent). There are variations on this frequency of use pattern. For example, liberal arts/comprehensive and doctoral/research institutions cite *student completion rates* as the second most frequently used type of evaluation.

The frequency with which evaluations are conducted varies by type of evaluation used. Course/program evaluation by students (67 percent) and evaluation of student completion rates (55 percent) are conducted more frequently on a semester/quarterly basis for public institutions (see Table 10). Course or program evaluation by instructors (43 percent), academic follow-up studies (42 percent), and effectiveness studies (50 percent) are conducted more frequently on an annual basis for public institutions. The pattern for private institutions is similar.

The survey asked institutions what percentage of students complete their remedial programs and courses in reading, writing, and mathematics. Table 11 shows that the median

TABLE 10

Percentage of Institutions with Remedial Course/Program Evaluations, by Institution Type SREB States, 1988-89

Institution Type	Course/Program Evaluation by		Evaluation of Students		Course/ Program Effec- tiveness
	Student	Instructor	Comple- tion Rate	Academic Follow-up /Studies	
Public					
Two-Year (N=241)	92.9	70.5	64.3	60.6	57.3
Liberal Arts/Comprehensive (N=97)	92.8	70.1	73.2	66.0	63.9
Doctoral/Research (N=39)	82.1	66.7	71.8	71.8	61.5
All Public (N=377)	91.8	70.0	67.4	63.1	59.4
All Private (N=140)	85.7	70.0	58.6	55.0	42.9
All Institutions (N=517)	90.1	70.0	65.0	60.9	54.9

Note: Each evaluation by institution type category is based on the number of institutions shown.

TABLE 11

Median Percent of Students Who Sucessfully Complete Prescribed Remedial Program/Courses in Reading, Writing, and Mathematics, by Institution Type, SREB States 1988-89

Institution Type	Median Percent of Remedial Students Who Successfully Completed:			
	Pres- cribed Program	Reading Course	Writing Course	Mathe- matics Course
Public				
Two-Year (N=241)	50.0	70.0	68.0	60.0
Liberal Arts/Comprehensive (N=97)	60.0	80.0	70.5	63.0
Doctoral/Research (N=39)	70.0	80.0	81.0	70.0
All Public (N=377)	50.0	75.0	70.0	60.0
All Private (N=140)	70.5	90.0	80.0	80.0
All Institutions (N=517)	60.0	75.0	74.5	65.0

Note: Each category of median completion rates is based on the number of institutions shown.

successful completion rate is 60 percent; the median completion rates for reading and writing courses is 75 percent, and for mathematics courses 65 percent. Private institutions report successful completion rates that are 10 to 20 percentage points higher than public institutions. Also, completion rates at doctoral/research institutions are higher than liberal arts/comprehensive institutions, and liberal arts/comprehensive institutions are higher than rates at two-year institutions. The pattern is essentially the same for reading, writing, and mathematics.

Reporting Requirements

The survey collected information about the existence of specific policy requirements for reporting remedial program effectiveness/evaluations and asked whether the institution, the state or system office, or both, require the reporting. Only 40 percent of all responding institutions reported that they operated under specific policy requirements to report remedial program effectiveness or evaluations (17 percent of the private colleges and 48 percent of the public institutions). Public two-year colleges, which provide the majority of remedial education for higher education, are the institutions least likely to be subject to specific reporting requirements concerning their remedial programs (39 percent), while doctoral/research institutions, which provide the least amount of remediation, have the highest percentage (72 percent) of institutions operating under specific policies.

About a fourth of the public institutions with specific reporting policies are required to prepare reports by both the institution and the state or system. Over half of these institutions report that they operate under policies that are strictly state- or system-initiated.

Exit Criteria

What criteria do institutions use to determine when students can exit remedial courses or programs? Descriptions were provided of ways students might exit remedial education. Institutions were then asked to identity each method they used in the subject areas of reading, writing, and mathematics. *Completion of course/program sequence* is used by over 77 percent of all institutions in writing and mathematics, and 63 percent in reading. Less than half of all institutions require *the passing of exit tests* as criteria for exiting remedial reading (46 percent), writing (49 percent), and mathematics (47 percent). For institutions in which students must pass exit tests in writing and mathematics, over 62 percent use tests that differ from the original placement tests. And, 70 percent of these institutions use institutionally developed, rather than standardized tests. In reading, the percentages are lower —55 percent of the institutions use tests that differ from the original placement tests, and 38 percent use tests that are institutionally or locally developed.

The general pattern described above holds true for most types of institutions covered by the survey. Public institutions seem to use remedial exit criteria at a higher rate than private institutions.

TABLE 12

Average Number of Faculty Who Teach at Least One Remedial Course in Reading, Writing, or Mathematics, by Institution Type, SREB States, 1988-89

Institution Type	Reading			Writing			Mathematics		
	Number of Institutions Reporting	Number of Faculty Reported	Average Faculty per Institution	Number of Institutions Reporting	Number of Faculty Reported	Average Faculty per Institution	Number of Institutions Reporting	Number of Faculty Reported	Average Faculty per Institution
Public									
Two-Year (N=241)	239	1068	4.5	240	1796	7.5	240	2274	9.5
Liberal Arts/Comprehensive (N=97)	93	315	3.4	95	570	6.0	95	651	6.9
Doctoral/Research (N=39)	35	158	4.5	35	341	9.7	35	322	9.2
All Public (N=377)	367	1541	4.2	370	2707	7.3	370	3247	8.8
All Private (N=140)	130	189	1.4	133	307	2.3	133	271	2.0
All Institutions (N=517)	497	1730	3.5	503	3014	6.0	503	3518	7.0

Remedial Faculty

A review of the literature indicated that little is known about those who teach remedial courses at the collegiate level. The data in Tables 12, 13, 14, 15, and 16 provide some new insight into this matter.

How many faculty teach at least one remedial course?

Responding institutions report, on average, four faculty per institution who teach at least one remedial course in reading. For writing and mathematics, the average number of faculty per institution are six and seven respectively—nearly twice those for reading. This difference may be explained in part by typical enrollment patterns in remedial courses which find more students entering college in need of remedial writing and mathematical assistance than remedial reading (Abraham, 1991).

The average number of faculty providing remediation is almost four times greater for public than private institutions in all three subject areas. As expected, there is some variation among institutional types. However, it is interesting that almost no differences exist in the average number of faculty at two-year colleges and doctoral/research institutions, especially in reading and mathematics.

Are remedial faculty part-time or full-time?

Institutions rely heavily on part-time faculty to teach remedial students. The data show that in reading and writing, a slightly higher percentage of faculty are full-time—52 versus 48 percent and 56 versus 44 percent, respectively. In mathematics, the converse is true, 49

percent of the faculty is full-time and 51 percent is part-time.

There are some interesting differences between institution types. For example, faculty who teach remedial reading and writing at private institutions are more likely to be employed full-time than those at public institutions. For mathematics, the ratio of full-time to part-time faculty is 60:40 for private and 50:50 for public institutions.

These data also raise the question: Do "full-time" faculty teach remedial courses as all or only a part of their full-time load? Responses to the next question suggest that the answer may vary across subject areas.

Under what conditions were faculty hired to teach remediation?

In reading, 67 percent of the faculty were hired specifically to teach remedial reading, and 25 percent were assigned or required to teach it. But, the majority of faculty teaching remedial writing (47 percent) were *assigned/required* to teach remedial writing and only 39 percent were *specifically hired* for the task. In mathematics, the distribution of faculty was evenly split between *specifically hired* and *assigned/required* to teach remedial mathematics (43 percent each).

Public institutions are more likely to hire instructors for the specific purpose of teaching remedial reading. While the majority of all institutions assign or require their faculty to teach

TABLE 13

Percentage of Remedial Reading Faculty by Status, Assignment, and Credentials, by Institution Type, SREB States, 1988-89

Institution Type	Status			Percent Remedial Faculty				Remedial Faculty Credentials			
	Number of Remedial Faculty	Percent Full-Time	Percent Part-Time	Number of Remedial Faculty	Percent Hired Specifically	Percent Assigned/Required	Percent Volunteered	Number of Remedial Faculty	Percent Doctorate	Percent Masters	Percent Bachelor
Public											
Two-Year (N=241)[1]	1,096 (239)[2]	49.7	50.3	1,172 (240)[2]	65.2	25.4	9.4	1,065 (240)[2]	8.5	73.6	17.9
Liberal Arts/Comprehensive (N=97)	320 (93)	57.5	42.5	285 (93)	73.3	22.1	4.6	308 (93)	19.8	68.2	12.0
Doctoral/Research (N=39)	176 (35)	53.4	46.6	140 (35)	80.7	12.9	6.4	166 (35)	21.7	67.5	10.8
All Public (N=377)	1,592 (367)	51.7	48.3	1,597 (366)	68.0	23.7	8.3	1,539 (368)	12.2	71.9	16.0
All Private (N=140)	192 (130)	56.8	43.2	180 (131)	60.0	36.1	4.9	175 (132)	21.1	72.0	6.9
All Institutions (N=517)	1,784 (497)	52.2	47.8	1,777 (499)	67.2	25.0	7.8	1,714 (500)	13.1	71.9	15.1

Note: [1] The numbers in parentheses in this column represent those institutions that offer remediation.
[2] The numbers in parentheses in these columns represent institutions actually reporting data.

TABLE 14

Percentage of Remedial Writing Faculty by Status, Assignment, and Credentials, by Institution Type, SREB States, 1988-89

Institution Type	Status			Percent Remedial Faculty				Remedial Faculty Credentials			
	Number of Remedial Faculty	Percent Full-Time	Percent Part-Time	Number of Remedial Faculty	Percent Hired Specifically	Percent Assitned/Required	Percent Volunteered	Number of Remedial Faculty	Percent Doctorate	Percent Masters	Percent Bachelor
Public											
Two-Year (N=241)[1]	1,886 (239)[2]	53.1	46.9	1,824 (240)[2]	39.1	46.3	14.6	1,812 (240)[2]	11.9	73.4	14.7
Liberal Arts/Comprehensive (N=97)	563 (95)	56.0	44.0	526 (95)	40.7	47.7	11.4	553 (95)	24.8	59.0	16.3
Doctoral/Research (N=39)	347 (35)	56.2	43.8	337 (35)	36.5	44.8	18.7	380 (35)	17.6	65.3	17.1
All Public (N=377)	2,796 (369)	54.1	45.9	2,687 (370)	39.1	46.4	14.5	2,745 (370)	15.3	69.4	15.3
All Private (N=140)	313 (133)	71.2	28.8	272 (132)	32.7	56.3	11.0	297 (132)	34.0	59.9	6.1
All Institutions (N=517)	3,109 (502)	55.8	44.2	2,959 (502)	38.5	47.3	14.2	3,042 (502)	17.1	68.4	14.4

Note: [1] The numbers in parentheses in this column represent those institutions that offer remediation.
[2] The numbers in parentheses in these columns represent institutions reporting data.

TABLE 15

Percentage of Remedial Mathematics Faculty by Status, Assignment, and Credentials, by Institution Type, SREB States, 1988-89

Institution Type	Status			Percent Remedial Faculty				Remedial Faculty Credentials			
	Number of Remedial Faculty	Percent Full-Time	Percent Part-Time	Number of Remedial Faculty	Percent Hired Specifically	Percent Assigned/Required	Percent Volunteered	Number of Remedial Faculty	Percent Doctorate	Percent Masters	Percent Bachelor
Public											
Two-Year (N=241)[1]	2,325 (240)[2]	46.6	53.4	2,336 (240)[2]	41.4	42.5	16.1	2,271 (240)[2]	9.3	70.7	19.9
Liberal Arts/Comprehensive (N=97)	646 (95)	53.7	46.3	627 (95)	47.4	41.6	11.0	631 (95)	21.6	63.4	15.1
Doctoral/Research (N=39)	325 (35)	51.1	48.9	332 (35)	47.9	39.8	12.3	357 (35)	12.9	67.8	19.3
All Institutions (N=377)	3,296 (370)	48.4	51.6	3,295 (370)	43.2	42.0	14.8	3,259 (370)	12.1	69.0	18.9
All Private (N=140)	283 (133)	59.4	40.6	270 (133)	34.4	57.4	8.1	293 (133)	20.8	65.2	14.0
All Institutions (N=517)	3,579 (503)	49.3	50.7	3,565 (503)	42.5	43.2	14.3	3,552 (503)	12.8	68.7	18.5

Note: [1] The numbers in parentheses in this column represent those institutions that offer remediation.
[2] The numbers in parentheses in these columns represent institutions actually reporting data.

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remedial writing, private institutions (56 percent) are more likely than public (46 percent) to engage in this practice. Mathematics faculty at public institutions are evenly split between *specifically hired* and *assigned/required*—about 42 percent in each category; at private colleges the percentages are 34 percent and 57 percent respectively.

What kind of degree credentials do remedial faculty have?

In all three subject areas, the highest degree held by the vast majority of remedial faculty, about 70 percent, is the master's degree. Another 15 percent have a doctoral degree, and the other 15 percent have a bachelor's degrees.

Remedial reading and writing faculties at private institutions are twice as likely to have earned the doctoral degree as those at public institutions. Remedial mathematics faculty at liberal arts/comprehensive colleges (22 percent) are over one-and-one-half times more likely to have a doctoral degree than mathematics faculty at doctoral/research institutions (13 percent). The full-time/part-time status of faculty may account for these differences. Private institutions are more likely to employ full-time than part-time remedial faculty, and the same is true for liberal arts/comprehensive colleges when compared to doctoral/research institutions.

Do institutions provide ongoing training for persons teaching remediation?

Only about a third of all institutions that have remedial education report that ongoing training is available for remedial instructors. Public institutions (41 percent) are twice as likely as private colleges to provide ongoing training for remedial instructors. Doctoral/research institutions are somewhat more likely than two-year institutions to provide such training.

The data suggest that higher education at all levels has made, at best, only a modest commitment to faculty development of remedial instructors.

How many faculty who teach remedial courses received training specific to remediation prior to actually teaching such courses?

Among all institutions, the median percent of instructors who have received prior training specific to remediation is 40 percent. The highest percent of instructors with prior training was at doctoral/research institutions (median=45 percent); the lowest percent was at liberal arts/comprehensive colleges (median=35 percent).

TABLE 16

Percentage of Institutions with Ongoing Training for Remedial Instructors and Median Percentage of Instructors with Prior Remedial Training, SREB States, 1988-89

Institution Type	Percent Institutions with ongoing Instructor Training for Remediation	Median Percent of Instructors with Prior Remedial Training
Public		
Two-Year (N=241)	38.6	40.0
Liberal Arts/Comprehensive (N=97)	43.3	34.5
Doctoral/Research (N=39)	46.2	45.0
All Public (N=377)	40.6	40.0
All Private (N=140)	21.4	41.5
All Institutions (N=517)	35.1	40.0

Note: The number of institutions used to determine medians represent no less than 80 percent of those shown.

Funding

Survey Findings on Funding

The SREB survey attempted to shed some light on financial issues; however, accurate information about the total cost of remedial education is difficult to obtain. Institutions were asked how remedial courses are funded on their campuses: by *general institutional funds allocated through the regular budgeting process*, by *special fees in addition to tuition*, or by *grants or contracts—federal, state, or private, or other funding sources.*

More than 90 percent of the institutions reported that remedial courses are supported by general institutional funds allocated through the regular budgeting process. Some programs are supported in part with special appropriations or other special funds that do not provide the long-term security of core academic funding. Over a fifth of the institutions supplement their remedial funding through outside contracts and grants. Public institutions are one-and-one-half times more likely than private institutions to fund their remedial programs with grants or contracts (see Table 17).

TABLE 17

Percentage of Institutions Using Different Sources of Remedial Education Funding, by Institution Type SREB States, 1988-89

Institution Type	General Institutional Funds	Special Fees	Grants/ Contracts	Other
Public				
Two-Year (N=241)	96.3	4.1	24.1	7.5
Liberal Arts/Comprensive (N=97)	91.8	4.1	24.7	0.0
Doctoral Research (N=39)	82.1	2.6	12.8	2.6
All Public (N=377)	93.6	4.0	23.1	5.0
All Private (N=140)	90.0	6.4	14.3	0.7
All Institutions (N=517)	92.6	4.6	20.7	3.9

Note: Each category of funding sources is based on the number of institutions shown.

Funding Issues and Concerns

Funding for remedial studies has been hotly debated among legislators and educators—and taxpayers—in recent years. Some argue that remedial study has no place in higher education. A central theme among these critics is that the basics of reading, writing, and mathematics have already been "bought and paid for" by funds appropriated to the K-12 system and should not be paid for again (at what may be a higher cost). Many parents and students see enrollment in remedial courses as an unnecessary delay that prolongs the educational process and increases the cost of a college education. Moreover, many college faculty members and administrators believe that remedial studies should not be part of a college's offering, and others believe that a highly visible program weakens the academic reputation of an institution.

These attitudes help explain why remedial programs often go unacknowledged within institutions—particularly the four-year and graduate colleges and universities—and why it is difficult to identify funding patterns or to determine costs for remedial services. The funds used

to operate remedial programs are often buried in the regular budgeting process and are difficult to trace or analyze. As a result, only a modest amount of well documented funding information is available, and it is not possible to provide truly comprehensive per student or program costs—defined and collected in the same way—for comparison across states or institutions. For these reasons, SREB's inquiry into the cost of remedial education is severely limited.

History and attitudes influence current operating conditions and make it difficult to gather and compare data about remedial program costs and funding sources. The difficulty is compounded by state funding formulas because they include different components and restrictions from state to state. In fact, before remediation can be a part of a state's funding formula, the state must formally recognize that institutions are providing remedial services, and the state must consider remedial programs enough of a priority to provide appropriations.

States with special funding provisions may use one of several approaches:

- *Adjusted student/faculty ratios*—Remedial courses are funded on the basis of a smaller student/teacher ratio than regular college-level courses.

- *Performance funding*—Institutions that are funded on the basis of their ability to achieve predetermined performance goals concerning preparation and advancement of academically underprepared students.

- *Lump-sum funding*—Predetermined dollar amounts that are awarded to institutions with remedial programs, with possible variation due to size of enrollment or whether an institution is a two-year or four-year college.

Funding systems generally are based on the principle that the cost to provide remedial programs is higher than the cost of a typical academic course, due to the more intensive nature of instruction (more student teacher contact hours) and the frequent use of laboratories or learning centers that are costly to equip and maintain.

Published cost estimates for remediation range from $2 or $3 million in some states to as much as $10 million in others. Some of this gap may be explained by state enrollment differences, but how much is uncertain. Other questions that cannot be answered with the data currently available include: To what extent is the range in total cost from state to state a function of actual differences in per student remedial funding levels? Do such figures include only course-based funding, or do they include other remedial support services—labs, tutoring, advisement, testing, etc?

States and institutions—public and private—need to do a better job tracking the true cost of remedial studies. Accurate financial data is necessary as an accompaniment to thorough program evaluations and later cost benefit analyses. With complete and accurate data, analysts might find, for example, that remedial programs are cost-effective and beneficial to significant numbers of students, either at some or all types of institutions. Or they might find that college level remediation is not cost-effective or that some higher cost programs are not as effective as some lower cost ones.

Conclusion

Well over one-third of the first-time full-time students entering colleges and universities in the SREB region need remedial assistance in reading, writing, or mathematics. This figure does not include many part-time and older returning students who also need these services. Given these large numbers, it is imperative that educators, legislators, and other state and institutional policymakers become knowledgeable about all aspects of remedial education. They need to know not just how many, but which students are affected, what is being affected and in what way, and how these programs function and fit within the mission of higher education.

The findings of this report give rise to the following questions:

- Is it possible to provide a quality education to the large numbers of college students admitted each year with remedial needs when there is so little known about remedial services, effectiveness, or cost?

- Is it realistic to expect states to achieve the SREB goal for the year 2000—that four out of five entering college students will be ready to begin college-level work—unless colleges closely examine the developmental needs of their students and report on their findings to state and public school officials?

The data in this report only begin to answer some of the structural and operational questions about remedial programs. Much more needs to be known about these programs and their consequences. This report points to several key policy issues that need to be addressed now by state and institutional leaders. Recommended actions for institutional and state leaders follow. These actions can help insure more efficient and effective remedial programs and, as a result, improve the overall quality of an undergraduate education.

Recommendations

✓ Institutions with remedial and developmental programs should have written, well publicized policies that govern placement of underprepared students.

Over 90 percent of the public and 70 percent of the private institutions say they have some form of remedial programs. Only about three-fourths of all institutions report they have written policies to govern the academic placement of underprepared first-time students.

✓ Institutions and states should make a concerted effort to establish a coordinated definition of *college level study* that applies to all institutions in a state or institutional system.

Less than half of all public institutions are guided by state or system level policies or standards for remedial placement. The practice of using different tests and different cut-off scores on the same tests to place students in remedial or regular college courses can raise serious questions about how *college level* is defined at the state or system level.

✓ **All institutions that admit underprepared students should require placement in remedial courses as a condition of admission.**

Only about 70 percent of the institutions *require* students who are identified as academically underprepared in reading, writing, or mathematics to enroll in remedial studies. An institution that has identified a student as academically deficient and enrolled the student has an ethical responsibility to help the student overcome the deficiencies—not simply allow students to "take their chances" in the regular college-level curriculum.

✓ **More institutions should seriously consider establishing summer remedial programs on their campuses.**

About a third of all institutions responding to the survey employ summer remedial programs for their entering freshmen. Summer remedial programs, where financially viable, make good educational sense. Students are introduced to campus life under less stressful conditions and, because there are fewer students, they receive more individualized attention. Chances are high that the students will be better able to handle college level study when the fall quarter or semester begins.

✓ **Every state and institution should have a policy for evaluating remedial programs. The policy should require the systematic compiling and reporting of comparable data on retention rates, achievement, grade-point-averages, progression, and graduation rates of remedial and non-remedial students.**

Only 31 percent of the survey respondents report that they keep retention records for students taking remedial education. Retention through to graduation is probably one of the most useful and easily determined measures of remedial program effectiveness. Further, less than 50 percent of responding institutions report that they operate under specific policy requirements to determine and report remedial program effectiveness.

✓ **Every institution should have exit criteria for remedial courses that establishes readiness to begin college-level study.**

The survey data suggest that the criteria institutions use for students to exit remedial courses or programs often lacks rigor or coordination. For instance, the practice of using exit tests that cannot be readily and reliably compared to initial screening or pre-tests makes it difficult to measure the effectiveness of a remedial activity in improving student performance.

✓ **Every effort should be made to provide well qualified and trained remedial instructors for underprepared entering college students, who frequently represent over a third of the entering college freshmen.**

The data on remedial faculty raise significant questions about the selection, preparation, and continuing professional development of part-time and full-time faculty who teach remedial

courses. Only 35 percent of the institutions report that they provide ongoing training for remedial faculty. Additionally, an average of only 40 percent of instructors receive training prior to teaching their first remedial course. These data suggest the need for a stronger commitment to faculty development if higher education institutions desire to provide high quality instruction to academically underprepared students.

✓ **Efforts should be made at institutions and at the state level to accurately assess costs and cost effectiveness of remedial and developmental programs.**

Currently, the cost of remediation at the collegiate level has not been accurately assessed at most institutions and in most states. Research indicates a need for better remedial cost management at the state and institutional levels.

The data in this study suggest that most colleges and universities cannot report with any depth, regularity, or certainty that the academically underprepared students they have freely admitted are getting the kind or quality help they need to have a reasonable chance of completing a degree program. Further, these data, or gaps in the data, suggest that it would be difficult for most state and institutional leaders to say that they are informed, knowledgeable, or understand the extent and impact these programs have on postsecondary education within their own spheres of responsibility.

It is easy for colleges and universities to be critical of the public schools for failing to adequately prepare many of their students who seek a college education. However, these same colleges and universities often compound the problem by accepting, then neglecting these students once they arrive on campus.

Finally, institutions must accept their responsibility to serve all of their students well. They should also accept the responsibility to provide clear evidence of these students' academic shortcomings to school administrators, school boards, teachers, and public leaders so that the problems can be addressed at a much earlier point in the educational pipeline.

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APPENDIX A

College-Level Placement Tests Used by Colleges and Universities in SREB States 1988-89

Reading
ACT-English subtest
ACT-Natural Science subtest
ACT-Social Studies subtest
ACT-Combined
APSCC-Reading
ASSET-Reading
California Achievement Test (CAT)
California Test of Basic Reading Skills
Carver Reading Progress Scale
CBCPT-Reading
Collegiate Placement Exam (CPE)—Georgia
Comparative Guidance & Placement Program
Comprehensive Test of Basic Skills (CTBS)
Degrees of Reading Power
HBJ-Audio-Visual Technical Test of Reading
In-house/Institutionally Developed
Iowa Silent Reading Test
Multiple Assessment Programs and Services (MAPS)-Descriptive Test of Language Skills-(DTLS)-Reading
MAPS-Comparative Guidance/Placement (CGP) -Reading Placement
MAPS-DTLS-Logical Relationship
MAPS-Reading (Self-scoring placement)
McGraw-Hill Reading Test
Michigan Test of English Language Proficiency
National Junior College Placement Test (NJCP)
Nelson-Denny Reading Test
NJ Basic Skills Test—Reading Comprehension
Pre-TASP-Test
SAT-Verbal
Scholastic Aptitude Test (SAT)-Combined
Stanford Diagnostic Reading Test
Stanford Test of Academic Skills
Tennessee's AAPP—Logical Relationships
Tennessee's AAPP— Reading Comprehension
Test of Academic Skills (TASK)
Test of Adult Basic Education (TABE)
Texas Academic Skills Program (TASP)

Writing
AAPP-Writing Sample
ACT-Combined
ACT-English Subtest
ACT-Social Studies Subtest
Aluminum Syntax Maturity Test
APSCC-Essay
APSCC-Writing
ASSET-Advanced Language Skills
ASSET-Language Usage
California Achievement Test (CAT)
CBCPT-Sentence Skills
College Board-Written English Expression Test
Collegiate Placement Exam (CPE)—Georgia
Comprehensive Test of Basic Skills (CTBS)
CPG
Differential Aptitude Test (DAT)-Language Usage
English Usage—Random House
In-house/Institutionally Developed
MAPS-CGP-Writing Placement
MAPS-DTLS-Sentence Structure Test
MAPS-DTLS-Usage Test
MAPS-Written English Expression (Self-scoring placement)
McGraw-Hill Basic Writing
National Junior College Placement Test (NJCP)
NJ Basic Skills Test—Sentence Structure
Pre-TASP Test
SAT-Combined
SAT-Verbal
Simon & Schuster Diagnostic Test
Stanford Test of Academic Skills
TASK
Test of Adult Basic Education (TABE)
Test of English as a Foreign Language (TOEFL)
Test of Standard Written English (TSWE)
Texas Academic Skills Program
The Cooperative English Test (CET)
TSWE-MAPS 2
Writing Sample/Essay

Mathematics
AAPP—Elementary Algebra
AAPP—Intermediate Algebra
AAPP—Arithmetic
ACT-Combined
ACT-Math subtest
Arithmetic Shell Tests
APSCC-Math
APSCC—Algebra
APSCC—Computation
ASSET-College Algebra
ASSET-Elementary Algebra
ASSET-Intermediate Algebra
ASSET-Numerical
California Achievement Test (CAT)
Carter Math Inventory
CBCPT-Arithmetic
CBCPT-Elementary Algebra
College Board-Math Achievement Test
Collegiate Placement Exam (CPE)—Georgia
Comprehensive Test of Basic Skills (CTBS)
Cooperative School College Ability Test (SCAT)
Differential Apptitude Math
Elementary Algebra Shell Tests
Intermediate Algebra Shell Tests

In-house/Institutionally Developed
MAPS-Applied Arithmetic (Self-scoring placement)
MAPS-CGP-Mathematics C Tests
MAPS-CGP-Mathematics D and E Tests
MAPS-Computation (Self-scoring placement)
MAPS-Descriptive Test of Mathematics Skills (DTMS)
-Arithmetic Skills Test
MAPS-DTMS-Elementary Algebra Skills Test
MAPS-DTMS-Intermediate Algebra Skills Test
MAPS-Intermediate Algebra (Self-scoring placement)
Mathematical Association of America
Mathematics Association, American Placement Test
Battery
McGraw-Hill Math Test
National Junior College Placement Test (NJCP)
New Jersey Basic Skills Test—Algebra
New Jersey Basic Skills Test—Computation
Pre-TASP Test
SAT-Combined
SAT-Math
Stanford Test of Academic Skills
State/System Developed Test
TASK
TASP
Test of Adult Basic Education (TABE)
The Comprehensive Math Test (CMT)

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